

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A computer-implemented method of constructing a portfolio, the method comprising:

generating a portfolio of investment assets that are held for a customer in a customer account by:

receiving target allocations ~~for~~ of percentages of different types of investment assets to include in the portfolio;

receiving a list of investment assets available for inclusion in the portfolio;
and

selecting, by one or more computer systems, investment assets from the list of investment assets based on a measure of the risk-adjusted excess return of selected investment assets and the received target allocations; and ~~[[.]]~~
determining, by the one or more computer systems, an asset allocation of the generated portfolio by:

comparing, by the one or more computer systems, the asset allocation of the generated portfolio to the target allocation.

2. (Currently amended) The computer-implemented method of claim 1 wherein the types of assets comprises ~~short-term~~ fixed income assets.

3. (Currently amended) The computer-implemented method of claim 1 wherein the target allocations comprise one or more categories of financial risk, ~~target allocations corresponding to different target allocation categories.~~

4. (Currently amended) The method of claim ~~[[3]]~~ 1 wherein determining, by the one or more computer systems, an asset allocation of the generated portfolio further comprises:

verifying that the asset allocation of the generated portfolio closely matches the target allocation ~~categories comprises a conservative category.~~

5. (Currently amended) The computer-implemented method of claim 1 further comprising determining the target allocations.

6. (Currently amended) The computer-implemented method of claim 5 wherein the determining comprises categorizing an investor based on investor responses to questions.

7. (Currently amended) The computer-implemented method of claim 1 wherein the measure of risk-adjusted excess return comprises an alpha measurement determined in accordance with:

$$R_t = \alpha + \beta_1 R_{1t} + \beta_2 R_{2t} + \dots + \beta_N R_{Nt} + \varepsilon_t, \text{ where}$$

α = the risk adjusted excess return (alpha);
 R_t = the excess return of a fund in month t ;
 R_{kt} = the excess return of factor k in month t ($K = 1 \dots N$);
 β_k = the β of factor k ($k = 1 \dots N$);
 ε_t = the tracking error in month t [$;$].

8. (Currently amended) The computer-implemented method of claim 1 further comprising determining weightings of risk for the selected investments.

9. (Currently amended) The computer-implemented method of claim 8 wherein determining weightings of risk comprises determining weightings using

$$\begin{aligned} & \text{Minimize } \lambda W^T H W - G^T W \\ & \text{Subject } \sum_{i=1}^N W_i = 1 \\ & \text{Upper}_{\text{stock}} \geq \text{Stock}\% \geq \text{Lower}_{\text{stock}} \\ & \text{Upper}_{\text{bonds}} \geq \text{Bonds}\% \geq \text{Lower}_{\text{bonds}} \\ & \text{Upper}_{\text{cash}} \geq \text{Cash}\% \geq \text{Lower}_{\text{cash}} \\ & \text{Upper}_{\text{foreign}} \geq \text{Foreign}\% \geq \text{Lower}_{\text{foreign}} \end{aligned}$$

where

W = weight matrix of fund tracking _error wrt the investment benchmark

G = p -value of funds

λ = risk aversion ratio

and

$p\text{-value} = t\text{-distribution}(\text{studentt}, n - p - 1)$

$$\text{student } t = \frac{\alpha}{\sigma(\varepsilon_i)/\sqrt{n - p}} = \text{information ratio} \times \sqrt{n - p}$$

$$\text{Information ratio} = \alpha/\sigma(\varepsilon_i)$$

where

α = average risk adjusted excess return during the period;

$\sigma(\varepsilon_i)$ = tracking - error wrt the custom benchmark;

n = number of observations;

p = number of the independent random variables;

$n - p - 1$ = degrees of freedom in t -test[[:]].

10. (Currently amended) The computer-implemented method of claim 1 wherein selecting further comprises selecting based on investment net assets.

11. (Currently amended) The computer-implemented method of claim 1 wherein selecting further comprises selecting based on a categorization of an investment.

12. (Currently amended) The computer-implemented method of claim 11 wherein the categorization ~~comprises~~ includes an investment objective ~~categorization~~.

13. (Currently amended) The computer-implemented method of claim 11 wherein ~~the~~ selecting further comprises selecting based on a style-category of an investment.

14. (Currently amended) The computer-implemented method of claim 1 wherein selecting comprises selecting based on an R^2 descriptive statistic indicating the consistency of an investment's risk-adjusted excess return measure.

15. (Currently amended) The computer-implemented method of claim 1 further comprising evaluating the constructed portfolio to verify that the constructed portfolio includes a specified level of fund diversification.

16. (Currently amended) The computer-implemented method of claim 15 wherein the evaluating the constructed portfolio further comprises determining whether sector allocation of the constructed portfolio ~~corresponds to~~ matches a sector allocation of a market benchmark.

17. (Currently amended) The computer-implemented method of claim 15 wherein the evaluating the constructed portfolio comprises determining whether ~~the constructed portfolio is too heavily weighted to~~ one of the selected investments in the constructed portfolio causes the constructed portfolio to exceed the target allocation of an asset.

18. (Currently amended) The computer-implemented method of claim 15 wherein the evaluating the constructed portfolio comprises determining whether the portfolio includes the target allocation for a particular type of asset, the constructed portfolio is insufficiently weighted to one of the selected investments.

19. (Currently amended) The computer-implemented method of claim 15 further comprising constructing a ~~different~~ second portfolio.

20. (Currently amended) The computer-implemented method of claim 19 wherein constructing a different portfolio comprises constructing a different portfolio after modifying the target asset allocations.

21. (Currently amended) The computer-implemented method of claim 1 further comprising provided a report describing the constructed portfolio.

22. (Currently amended) The computer-implemented method of claim 1 further comprising receiving a target allocation to company stock.

23. (Currently amended) The computer-implemented method of claim 22 further comprising:
receiving data that allocates part of the portfolio to a company's stock; and
adjusting the received target allocations for different types of assets based on the received portfolio allocation to company stock.

24. (Currently amended) The computer-implemented method of claim 23 wherein the adjusting the target allocations for different types of assets comprises adjusting the target allocations such that the target allocations and the allocation to

company stock have an associated risk level substantially the same as a risk level associated with a portfolio not having an allocation to company stock.

25. (Currently amended) A computer-implemented method of constructing a portfolio, the method comprising:

receiving target allocations of percentages of ~~for~~ different types of assets, the types of assets comprising domestic stock funds, foreign stock funds, bonds, and fixed income ~~short-term~~ assets;

receiving a list of investments available for inclusion in the portfolio;

screening the list of investments;

selecting and weighting investments from the screened list of investments based on a measure of the risk-adjusted excess return of selected investments and the received target allocations, the measure of risk-adjusted excess return comprising an alpha measurement determined in accordance with:

$$R_t = \alpha + \beta_1 R_{1t} + \beta_2 R_{2t} + \dots + \beta_K R_{Kt} + \varepsilon_t,$$

α = the risk adjusted excess return (alpha);

R_t = the excess return of a fund in month t ;

R_{kt} = the excess return of factor k in month t ($K = 1 \dots N$);

β_k = the β of factor k ($k = 1 \dots N$);

ε_t = the tracking error in month t ;

the weightings determined using

$$\begin{aligned}
& \text{Minimize } \lambda W^T H W - G^T W \\
& \text{Subject } \sum_{i=1}^N W_i = 1 \\
& \text{Upper}_{\text{stock}} \geq \text{Stock}\% \geq \text{Lower}_{\text{stock}} \\
& \text{Upper}_{\text{bonds}} \geq \text{Bonds}\% \geq \text{Lower}_{\text{bonds}} \\
& \text{Upper}_{\text{cash}} \geq \text{Cash}\% \geq \text{Lower}_{\text{cash}} \\
& \text{Upper}_{\text{foreign}} \geq \text{Foreign}\% \geq \text{Lower}_{\text{foreign}}
\end{aligned}$$

where

W = weight matrix of fund tracking_error wrt the investment benchmark

G = p -value of funds

λ = risk aversion ratio

and

p -value = t -distribution (student t , $n - p - 1$)

student $t = \frac{\alpha}{\sigma(\varepsilon_t)/\sqrt{n - p}} = \text{information ratio} \times \sqrt{n - p}$

Information ratio = $\alpha/\sigma(\varepsilon_t)$

where

α = average risk adjusted excess return during the period;

$\sigma(\varepsilon_t)$ = tracking - error wrt the custom benchmark;

n = number of observations;

p = number of the independent random variables;

$n - p - 1$ = degrees of freedom in t -test[[]].

26. (Currently amended) A computer program product, disposed on a computer readable medium, for constructing a portfolio, the computer program product including instructions for causing a processor to:

generate a portfolio of investment assets that are held for a customer in a customer account by:

receiving[[c]] target allocations ~~for~~ of percentages of different types of investment assets to include in the portfolio;

receiving[[c]] a list of investment assets available for inclusion in the portfolio; and

selecting investment assets from the list of investment assets based on a measure of the risk-adjusted excess return of selected investment assets and the received target allocations; and [[.]]

determining an asset allocation of the generated portfolio by:

comparing the asset allocation of the generated portfolio to the target allocation.

27. (Currently amended) The computer program product of claim 26 wherein the types of investment assets comprise[[s]] fixed income ~~short-term~~ assets.

28. (Currently amended) The computer program product of claim 26 wherein the target allocations comprise one or more categories of financial risk, ~~target allocations corresponding to different target allocation categories.~~

29. (Currently Amended) The computer program product of claim 26 [[28]] wherein instructions to determine an asset allocation of the generated portfolio further comprises instructions to:

verify that the asset allocation of the generated portfolio closely matches the target allocation categories comprises a conservative category.

30. (Previously presented) The computer program product of claim 26 wherein the measure of risk-adjusted excess return comprises an alpha measurement determined in accordance with:

$$R_t = \alpha + \beta_1 R_{1t} + \beta_2 R_{2t} + \dots + \beta_N R_{Nt} + \varepsilon_t, \text{ where}$$

α = the risk adjusted excess return (alpha);

R_t = the excess return of a fund in month t ;

R_{kt} = the excess return of factor k in month t ($k = 1 \dots N$);

β_k = the β of factor k ($k = 1 \dots N$);

ε_t = the tracking error in month t $[[\cdot]]$.

31. (Currently amended) The computer program product of claim 26 further comprising instructions for causing the processor to determine weightings of risk for the selected investments.

32. (Currently amended) The method of claim 31 wherein the instructions for determining weightings of risk comprises instructions for determining weightings using

$$\text{Minimize } \lambda W^T H W - G^T W$$

$$\text{Subject } \sum_{i=1}^N W_i = 1$$

$$Upper_{stock} \geq Stock\% \geq Lower_{stock}$$

$$Upper_{bonds} \geq Bonds\% \geq Lower_{bonds}$$

$$Upper_{cash} \geq Cash\% \geq Lower_{cash}$$

$$Upper_{foreign} \geq Foreign\% \geq Lower_{foreign}$$

where

W = weight matrix of fund tracking _error wrt the investment benchmark

G = p - value of funds

λ = risk aversion ratio

and

p - value = t - distribution (student t , $n - p - 1$)

$$\text{student } t = \frac{\alpha}{\sigma(\varepsilon_t)/\sqrt{n-p}} = \text{information ratio} \times \sqrt{n-p}$$

$$\text{Information ratio} = \alpha / \sigma(\varepsilon_t)$$

where

α = average risk adjusted excess return during the period;

$\sigma(\varepsilon_t)$ = tracking - error wrt the custom benchmark;

n = number of observations;

p = number of the independent random variables;

$n - p - 1$ = degrees of freedom in t - test[[]].

33. (Currently amended) The computer program of claim 26 wherein the instructions for selecting further comprise instructions for selecting based on investment net assets.

34. (Currently amended) The computer program of claim 26 wherein the instructions for selecting further comprise instructions for selecting based on a categorization of an investment.

35. (Original) The computer program product of claim 26 wherein the instructions for selecting comprise instructions for selecting based on an R^2 descriptive statistic indicating the consistency of an investment's risk-adjusted excess return measure.

36. (Currently amended) The computer program product of claim 26 further comprising instructions for evaluating the constructed portfolio to verify that the constructed portfolio includes a specified level of fund diversification.

37. (Currently amended) The computer program product of claim 36 wherein the instructions for evaluating the constructed portfolio comprise instructions for determining whether sector allocation of the constructed portfolio ~~corresponds to~~ follows a sector allocation of a market benchmark.

38. (Original) The computer program product of claim 26 further comprising instructions for modifying the target asset allocations.

39. (Original) The computer program product of claim 26 further comprising instructions for receiving a target allocation to company stock.

40. (Currently amended) The computer program product of claim 39 further comprising instructions for;
receiving data that allocates part of the portfolio to a company's stock; and
adjusting the received target allocations for different types of assets based on the received portfolio allocation to company stock.

41. (Original) The computer program product of claim 40 wherein the adjusting the target allocations for different types of assets comprises adjusting the target allocations such that the target allocations and the allocation to company stock have an associated risk level substantially the same as a risk level associated with a portfolio not having an allocation to company stock.